

A top-down photograph of a person's hands, wearing a grey knit sweater, planting rows of lettuce seedlings in a garden bed. The soil is dark and rich. The lettuce plants are arranged in neat rows, with some showing reddish-purple leaves and others being bright green. The person's hands are positioned over a row of bright green lettuce, appearing to be adjusting or planting them.

Gardening for Fall

Big Country Master Gardeners

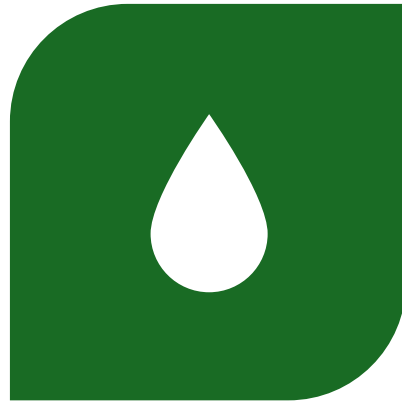
Saturday Seminar

June 29, 2024

Let's all grow fall veggies



MILD FALL AND
WINTER CLIMATE



LESS WATER NEEDED



LESS BUG PRESSURE



Average Frost Dates for Abilene, Texas

- Last Spring Frost – March 29th
- First Fall Frost - November 5th
- Growing season is 220 days

Preparing for a fall garden

- Add compost to your garden beds several weeks before planting. Till in 8 – 12 inches
- Check water source
- Layout your garden
- Purchase seeds or starters



Selecting veggies

Root veggies

Beets Carrots Garlic
Turnips Radish Onions

Greens

Lettuce Spinach Kale
Collards Cabbage Broccoli
Swiss Chard Cauliflower
Brussel Sprouts

Summer Veggies

Beans Corn Cucumbers
Squash Pumpkin





Root Vegetables

- Know first frost date
- Plant seeds in ground
- Be sure to thin seedlings
- Succession planting
- Harvest dates



Beets

- Varieties: Detroit Dark Red, Golden, Chioggia (candy stripe), Cylindra
- Grow in loose well drained soil, amend clay with organic matter
- Plant $\frac{1}{2}$ inch deep – one inch apart then thin to 1 to 3 inches apart. Rows 12- 18 inches apart
- Start planting in September – try planting seeds every 2 weeks to extend harvest.
- Matures in 50-65 days
- Beets can withstand cool temps
- Beet tops high in Vitamin A
- How to eat: Pickled, juiced, raw, roasted, sauté tops or toss in a salad



Carrots

- Varieties: Danvers, Nantes half long, Red Core Chantenay
- Full sun to part shade – great in flower beds and containers
- Best planted in loose, sandy soil – in heavier soils they mature slowly
- Plant $\frac{1}{4}$ to $\frac{1}{2}$ inch deep in rows 12 – 30 inches apart – Thin to 2 – 3 inches apart. Keep moist – germination can be tricky, 5-21 days
- Sow seeds in September, every two weeks for longer harvest times.
- Maturity in 60 to 90 days depending on variety
- Likes cool temps, can overwinter, plant in fall and spring
- Vitamin A and Beta-carotene (eye health)
- How to eat: raw, roasted, steamed, in cake, juiced, pickled, grilled



Garlic

- Varieties : Hard neck for Northern gardeners & Soft neck for us in the South have more intense flavor. California Early, Mexican Purple and French Mild Silverskin. Elephant garlic – needs a long cool growing climate.
- Full sun - 6 to 8 hours a day
- Prepare soil with compost, make sure its well draining. Raised beds are a great option
- Plant one clove 2 inches deep, every 4 to 8 inches apart, rows 6 to 12 inches apart
- Plant in fall – late September to early November, cover with frost cloth or hay during frigid weather.
- Harvest June to August when tops are yellow and begin to fall over
- Heavy feeder – needs fertilizer and keep area weed free.
- After harvesting, cure garlic for 2 weeks in a dry, airy, cool place

Greens

- Know frost dates
- Seeds or starter plants
- Succession planting
- Harvest dates





Swiss Chard

- Varieties: Bright Lights, Fordhook Giant, Silverado
- Super easy to grow, is a gorgeous plant, and is a superfood
- Can grow in some shade but loves sun, can tolerate heat
- Well drained soil that is amended with compost or aged manure
- Seeds planting depth $\frac{1}{2}$ to 1 inch, every 6 inches and rows 18 inches apart. Starter plants 12 to 16 inches apart.
- Plant seeds in spring 2-3 weeks before last frost and in fall 40 days before first frost.
- Start harvesting when leaves are 6 to 8 inches tall and harvest regularly to encourage new growth
- High in Vitamin A, C and K
- Cook like spinach, ribs can be a substitute for celery, chop up for salads, substitute for tortillas.

Cabbage

- Varieties: Savoy Ace, Early Jersey Wakefield, Blue Dynasty
- Needs 6 to 8 hours of full sun a day
- Needs a steady supply of water and fertilizer
- Plant seeds $\frac{1}{4}$ inch deep, 12 to 24 inches apart in rows. Starter plants 12 to 24 inches apart 6 to 8 weeks before last spring frost
- Harvest after 70 days or when the head is the desired size and firm
- Optimum growing temp is 60-65 degrees F, protect during freezing temps
- Winter cabbages are sweeter after a light frost.
- Can store in root cellar for up to 3 months
- Enjoy fresh, sliced thick and grilled, in stir fry, pickled, fermented, slaw, or steamed



Cabbage Pests

- Cabbage worm
- Stinkbugs
- Thrips
- Aphids
- Cabbage loopers
- Chickens





Spinach

- Varieties: Melody, Baby leaf, Savoy (Bloomsdale), Malabar (vine) & New Zealand (perennial) are more heat tolerant
- Tolerates full sun to light shade
- Add compost to soil a few weeks prior to planting
- Plant ½ inch deep every 2 inches with rows 12 to 18 inches apart. Thin plants to 3 – 4 inches. Plant every 2 weeks for continuous harvest
- Water regularly – keep moist. Fertilize with a high nitrogen fertilizer as needed
- From seed to harvest is 6 about weeks. Cut outer leaves
- Plant in the fall when soil temps are 70° F or cooler. In Spring, plant seeds when soil temp is 40° F. Cover if temps are below freezing
- High in Iron, Calcium, vitamins A, B and C.
- Enjoy fresh in salads, on sandwiches, sauté, soups, juice, freeze

Broccoli

- Varieties: Green Comet, Packman
- Needs 6 to 8 hours of sun
- Amend soil with compost or manure a few weeks before planting
- Spring planting – plant indoors 6 – 8 weeks before last frost, plant in ground 2 – 3 weeks before last frost
- Fall planting – plant seeds in ground 85-100 days before first fall frost (July 28 – August 17)
- Plant seeds in ground ½ inch deep 3 inches apart with rows 30 inches apart. Transplants 12 – 20 inches apart
- Keep well watered and fertilize as needed. Do not water the heads – they can rot. Mulch around base of plants
- Does best in 65 – 70-degree temps
- Harvest in morning
- Vitamin A, folic acid, potassium, iron
- Serve fresh with dip, roast, steam, sauté, great in soups, casseroles, and salads. Freeze for longer storage



Bolting

- As temperatures increase, plants will begin to Bolt and send shoots with flowers to produce seeds.
- Bees and pollinators love visiting these flowers
- Collect seeds for your next fall garden



Summer Vegetables

- Fall Frost date is important!
- Extending growing season of summer veggies
- Average Fall Frost date is
 - November 5th

30 days – October 6th

60 days – September 6th

80 days – August 17th

100 days – July 23rd

Season	Frost-susceptible crops (will be killed or injured by temperatures below 32°F)	Frost-tolerant crops (can withstand temperatures below 32°F)
Early-season vegetables: 30 to 60 days to harvest	Bush bean, summer squash	Beet, leaf lettuce, mustard, radish, spinach, turnip, turnip green
Mid-season vegetables: 60 to 80 days to harvest	Cucumber, sweet corn, lima bean, okra, pepper, cherry tomato	Broccoli, carrots, Chinese cabbage, green onion, kohlrabi, parsley
Late-season vegetables: 80+ days to harvest	Cantaloupe, eggplant, Irish potato, pumpkin, sweet potato, tomato, watermelon, winter squash	Brussels sprouts, bulb onion, cabbage, cauliflower, garlic

Don't forget about:

- Onions
- Potatoes
- Sugar or Snow peas



Onions

- Varieties:

Short day: Texas 1015, Red Burgundy

Long Day: Sweet Spanish, Candy

Intermediate: Alabaster, Cimarron, Riviera

- Plant in full sun
- Loose, well prepared soil
- Plant onion sets in January or February, $\frac{3}{4}$ inches deep and 3 inches apart
- Harvest as green onions when the size of a pencil. Harvest dry-bulb onions when the tops begin to fall over (May – July)
- Onions like cooler temperatures may need to cover for a deep freeze.

<https://agriflifeextension.tamu.edu/library/gardening/onions/>





Potatoes

- Varieties: Atlantic, Yukon Gold, Norland, Kennebec
- Full sun
- Soil needs to be well draining and work in organic matter. Keep moist and add a slow-release fertilizer
- Dig a trench 4 inches wide and 6-8 inches deep, place seed potato, cut side down, cover with 3 -4 inches of soil. Space 12 inches apart. As potatoes grow, add more soil to the base of the plant (hilling).
- Can be grown in containers and grow bags
- Plant in February
- Harvest in May or June – carefully dig up – do not wash
- Store potatoes in a cool dark place with air circulation - 40-45 degree temps are ideal.



Peas

- Varieties: Early Snap, Little Marvel, Super Sugar, Sugar Ann
- Well draining soil.
- Plant seeds 8-10 weeks before frost date. May need to use an inoculant if first time planting. Plant seeds $\frac{1}{2}$ inch deep, 3 to 5 inches apart. Rows 12 – 36 inches apart depending on variety (dwarf).
- Plant in Fall or Spring
- Provide support – trellis or fence. Keep moist and mulch for moisture retention.
- Enjoy these sweet crunchy garden treats right off the vine.

Planting Chart

Chart is from a 2014 publication and Taylor County hardiness zone is now 8a (10-15°)

Table 3. Average minimum temperatures for Texas gardening zones.

Texas gardening zone	USDA Hardiness Zone	Average minimum temperature
Zone I	Zone 6	-10-0°F
Zone II	Zone 7	0-10°F
Zone III	Zone 8	10-20°F
Zone IV	Zone 9A	20-25°F
Zone V	Zone 9B	25-30°F

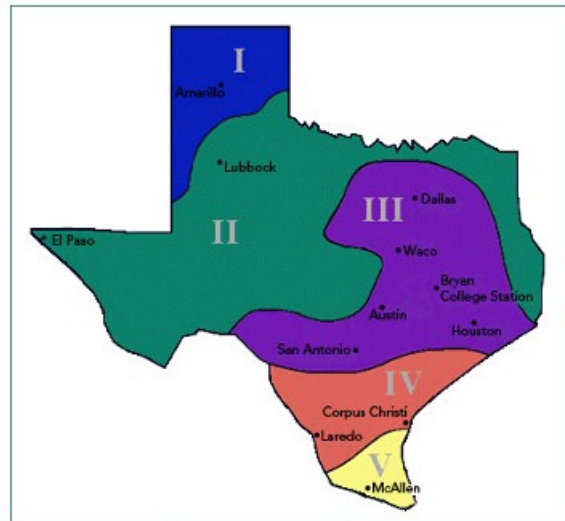


Figure 1. Gardening regions of Texas.

Table 1. Average planting dates for fall vegetables in various growing regions of Texas.

Vegetables	Region I	Region II	Region III	Region IV	Region V
Beans, snap bush	Jul 15	Aug 1	Sep 1	Sep 10	Oct 1
Beans, Lima bush	Jul 15	Jul 25	Aug 20	Sep 1	Sep 15
Beets	Aug 15	Sep 1	Oct 15	Nov 1	Dec 15
Broccoli	Jul 15	Aug 1	Sep 1	Oct 1	Nov 1
Brussels sprouts	Jul 15	Aug 1	Sep 1	Oct 1	Nov 1
Cabbage	Jul 15	Aug 1	Sep 1	Oct 1	Nov 1
Carrots	Jul 15	Aug 15	Nov 10	Nov 20	Dec 15
Cauliflower	Jul 15	Aug 1	Sep 1	Oct 1	Nov 1
Chard, Swiss	Aug 1	Aug 15	Oct 1	Oct 20	Dec 15
Collards	Aug 1	Aug 15	Oct 10	Oct 20	Dec 15
Corn, sweet	Jul 1	Aug 10	Aug 20	Sep 10	Sep 20
Cucumber	Jul 15	Aug 1	Sep 1	Sep 10	Oct 1
Eggplant	Jul 1	Jun 15	Jul 1	Jul 10	Aug 1
Garlic (cloves)	Jul	Aug	Oct	Nov	Dec
Kohlrabi	Aug 15	Sep 1	Sep 10	Oct 1	Nov 1
Lettuce, leaf	Sep 1	Sep 15	Oct 10	Nov 1	Dec 1
Mustard	Sep 1	Oct 1	Nov 1	Dec 1	Dec 15
Onion (seed)	Not recommended	Not recommended	Nov 1	Dec 1	Dec 15
Parsley	Sep 15	Oct 1	Oct 10	Nov 1	Dec 1
Peas, southern	Jun 15	Jul 1	Aug 1	Aug 15	Sep 1
Pepper	Jun 1	Jun 15	Jul 1	Jul 15	Aug 1
Potato	Not recommended	Aug 1	Sep 1	Oct 1	Not recommended
Pumpkin	Jun 1	Jul 1	Aug 1	Aug 10	Sep 1
Radish	Sep 1	Oct 1	Nov 25	Dec 1	Dec 15
Spinach	Aug 15	Sep 1	Nov 15	Dec 1	Dec 15
Squash, summer	Aug 1	Aug 15	Sep 10	Oct 1	Oct 10
Squash, winter	Jun 15	Jul 1	Aug 10	Sep 1	Sep 10
Tomato	Jun 1	Jun 15	Jul 1	Jul 10	Aug 1
Turnip	Sep 1	Oct 15	Nov 1	Dec 1	Dec 15

Online Resources

- Fall Vegetable Gardening Guide:
<https://agriflifeextension.tamu.edu/browse/featured-solutions/gardening-landscaping/fall-vegetable-gardening-guide-for-texas/>
- Vegetable Variety Selector tool: https://aggie-hort.tamu.edu/publications/veg_variety/

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Thank you for attending

- Presentation will be on the BCMG website
- <https://bcmgtx.org/>

